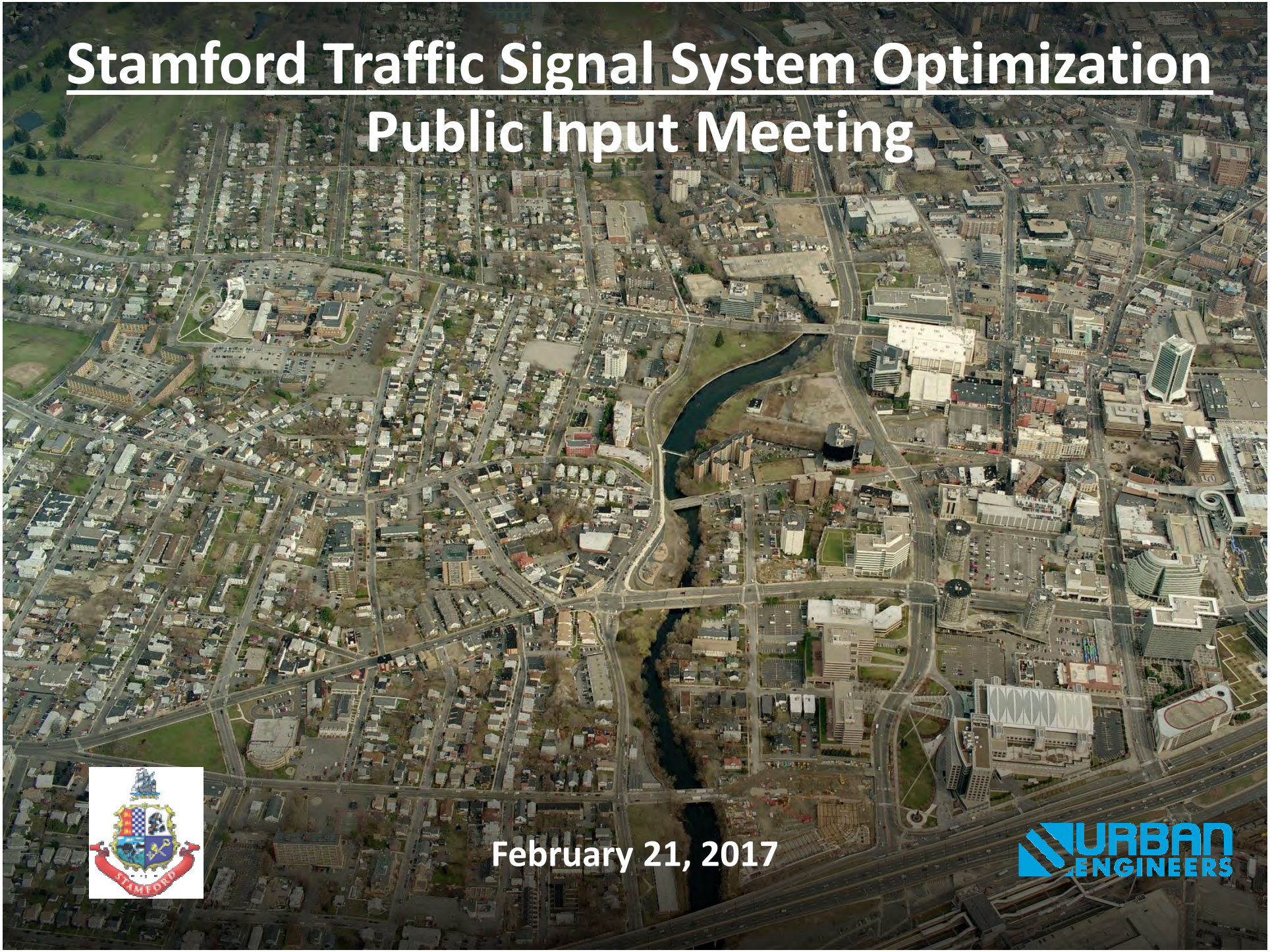
Stamford Traffic Signal System Optimization

Public Input Meeting



February 21, 2017

Agenda

What is Signal Optimization?

Why perform it?

What are the benefits?

What are the steps to do Signal Optimization?

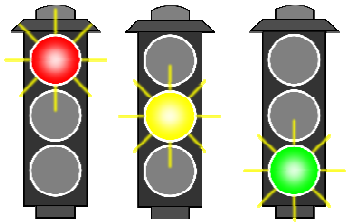
What is the Schedule?

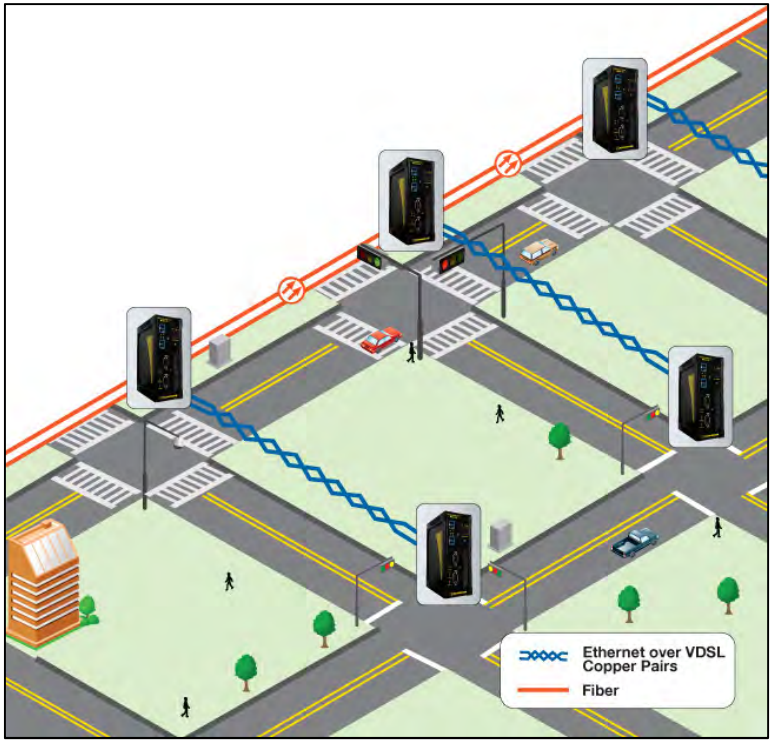
How can you help?

How can you stay informed?

What is Signal Optimization?

- Adjust signal timings to be more efficient
  - Main road flows smoother
  - Sidestreet delay is reduced
- Create timing plans for changes in traffic patterns
  - Morning
  - Lunch time
  - Evening
  - Weekend
  - Overnight





Why Perform it?

- 300,000 Traffic Signals in United States. 75% could be improved by updating signal equipment and/or signal timings.
- Last time Stamford optimized signal timings was over 25 years ago

What are the Benefits?

- Shorter travel times
- Reduced delay and waiting time at signals
- Reduced fuel consumption and emissions
- Reduce the number of signals you stop at
- Improves safety
- Provides for all modes of travel
- Decrease pedestrian wait time
- Create zones so we can be more responsive to changes in local traffic patterns and volumes

What are the steps to do Signal Optimization?

Data Collection

- Traffic Counts with Miovision Scout Units
  - All 209 signalized intersections
  - Temporarily installed for one week

Miovision Scout Unit Temporarily Installed

What are the steps to do Signal Optimization?

Data Collection

- Travel Time Runs
  - Urban Team will complete GPS-based runs
  - Public can get involved
    - Smartphone application instructions
    - Provide a GPS data logger

iTunes

Google play

GPS-Tracker Pro

GPSLogger

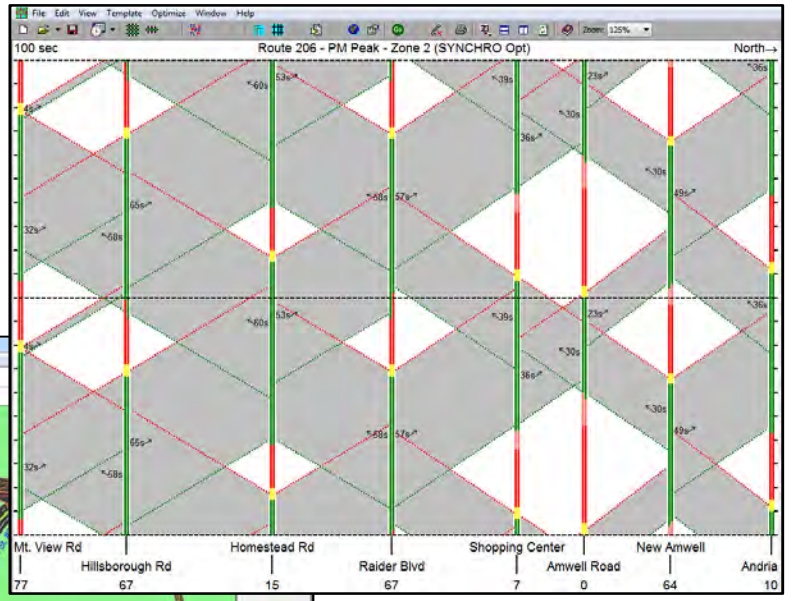
GPS Data Logger

What are the steps to do Signal Optimization?

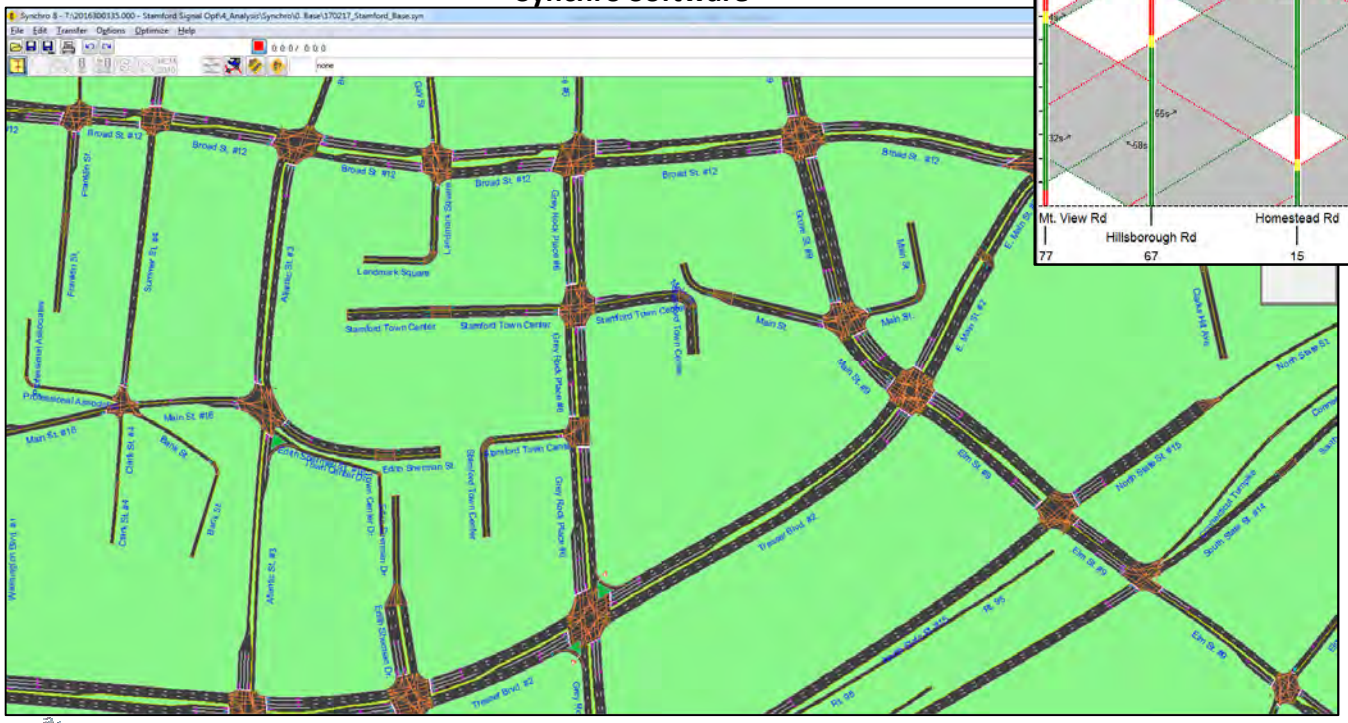
Analysis

- Computer Software
  - Synchro
  - Tru-Traffic

Tru-Traffic Software



Synchro Software

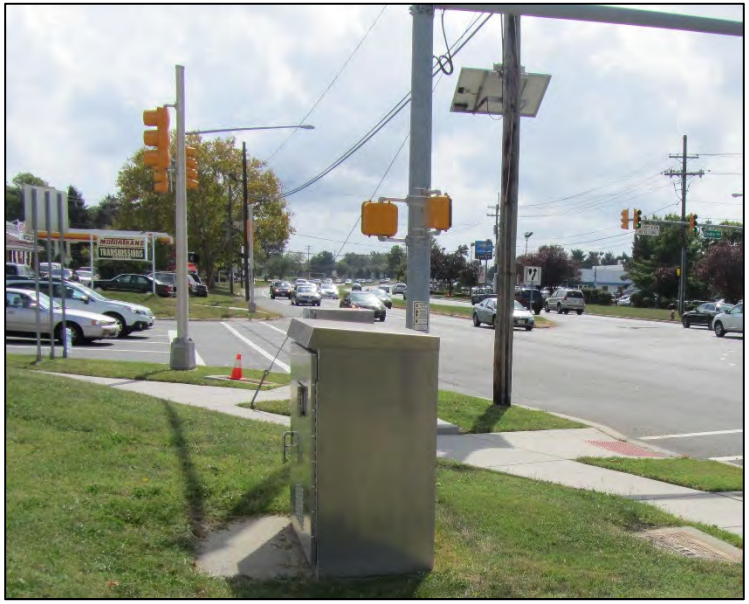


What are the steps to do Signal Optimization?

Field Implementation

- Input optimized timings into signal controllers located in cabinets
- Verify field timings
- Fine tuning timings in field as necessary

Traffic Signal Controller Cabinet - Exterior



Traffic Signal Controller Cabinet - Interior

What is the Schedule?

- Data Collection: March to May 2017
- Implementation Begins: August/September 2017
- Implementation Complete: Summer 2018

How You Can Help?

- Tell us about issues you see today
- Be specific about location, intersection approach, time of day
  - Not enough green time
  - Signal is not detecting you
  - Specific event (planned or unplanned) is causing congestion
- How to let us know:
  - Talk to us tonight or complete the public comment form
  - Submit comments online:
    - bit.ly/trafficsynchcomment
- Participate in before travel time study
  - Sign-up on the form tonight or sign-up on-line on the website
- Participate in after travel time study
  - Details to be posted on the project website when the project gets to that point
- Participate in Public Input Meetings

How You Can Stay Informed?

- Stamford Government website Traffic Engineering page

http://www.stamfordct.gov/traffic-engineering/traffic-synch-project

- Contact People

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